

REMARKS

Reconsideration and removal of the grounds for rejection are respectfully requested.

Claims 1-43 were in the application, claims 1-23, 27, 28 and 43 were withdrawn in response to a restriction requirement, claims 24 and 25 have been amended, and claim 36 has been cancelled.

The rejection of claim 36 as being indefinite has been rendered moot by its' cancellation.

Claims 24-26, 29, 30 and 34-42 were rejected as being obvious over Flint in view of Lee.

Claim 24 has been amended to clarify that the inventive method encompasses using egg yolk obtained from an egg laying farm animal to provide the ingestible composition for delivering the antibodies contained therein to the target animal. Support for the amendments is found at least on page 19, line 24-page 20, line 3, and page 26, lines 17-24.

To establish a prima facie case of obviousness based on a combination of references, there should be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicant. In re Raynes, 7 F.3d 1037, 1039, 28 U.S.P.Q.2D (BNA) 1630, 1631 (Fed. Cir. 1993); In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2D (BNA) 1443, 1445 (Fed. Cir. 1992). However, the search for a teaching or suggestion should not be rigid, and a more flexible approach to a determination of obviousness should be used so as to avoid a conflict with common sense. KSR International Co. v. Teleflex Inc. et al, 2007 U.S. Lexis 4745 U.S. Supreme Court, April 30, 2007. In this decision, however, the Supreme Court reaffirmed that

obviousness can not be established by a hindsight combination to produce the claimed invention. In re Gorman, 933 F.2d 982, 986, 18 U.S.P.Q.2D (BNA) 1885, 1888 (Fed. Cir. 1991). It is the prior art itself, and not the applicant's achievement, that must establish the obviousness of the combination.

The Examiner has acknowledged that Flint does not mention egg laying animals for use in producing anti-adipocyte antibodies and further Flint does not indicate that anti-adipocyte antibodies can be orally administered.

A person skilled in the art, looking at Flint, would be led away from the use of an egg-laying animal, as Flint describes "Immunization of sheep with rat fat cell membranes

2-year old Clun sheep were injected subcutaneously with 6 ml of incomplete Freund's adjuvant (2 parts oil to 1 part aqueous phase) containing 250 .mu.g of purified rat adipocyte plasma membrane. The injections were repeated at 3-weekly intervals and blood was obtained 10-18 days after the third injection and again 10-18 days after subsequent boosts.

The blood was allowed to clot and then centrifuged at 2000 g for 20 min to obtain serum. A crude immunoglobulin fraction was prepared from the serum by precipitation in 45% NH₄ SO₄ and centrifugation at 2000 g for 30 min. The immunoglobulin-containing pellet was redissolved in 0.1M phosphate buffer pH 7.4 and dialyzed extensively to remove all traces of NH₄ SO₄. This material was stored at -20.degree. C. until used for injection into rats.

C. In vivo treatment of rats with anti-rat-adipocyte serum

Female Wistar rats weighing 100-130 g were injected intraperitoneally with 2 ml

equivalent of anti-rat-adipocyte serum daily for 4 days. used in Flint.

The choice of animal, source of the anti-rat adipocyte serum, lamb blood, and route of administration differ from the present invention. As such, Flint would lead a person skilled in the art away from the use of egg-laying farm animals.

The combination with Lee is improper, as there is no teaching, suggestion or motivation supporting the combination. Rather, one could only propose such a combination using improper hindsight. Lee is strictly concerned with isolation and purification of egg immunoglobulin:

"The methods of the present invention are intended to provide egg immunoglobulins of about 90% purity, preferably of >90% purity (wherein any remaining components are benign) and a high yield range of 60 % to 90 %, preferably from 70% to 90% in practical kilogram quantities from large volumes of immune egg yolk. All of the methods employ one or more of the following processes: dilution with water and/or buffer, phase separation, pH adjustment, ultrafiltration, anion exchange chromatography, cation exchange chromatography, protein precipitation, gel filtration chromatography, desalting and drying."

Flint does not motivate a skilled person to consider Lee and to combine the teaching therein with Flint is contrary to what is actually taught in the Flint patent.

Even if the combination were proper, it would not arrive at the applicants' invention. Lee is not concerned with reducing adipocyte in animals, but with antibody purification. A skilled person in the art of adipose reduction would not look to a document concerning antibodies purification for solution or ideas. Specifically, Lee does not teach or suggest the use of antigens obtained from a source animal. Instead, Lee suggests the use of bacterial species as antigens, likely for inducing antibodies, for use in antibiotics. See col. 8, l. 16-18. The antibodies produced are for therapeutic purposes, such as infection control, that is, they are pharmaceutical products. See col. 3, l. 38-40. The patent is directed to purification methods, not with how to reduce adipose tissue in a target animal.

The claimed invention is directed to a new and novel method for reducing adipose tissue, by ingestion of egg yolk antibodies obtained from egg laying farm animals, with effectiveness achieved even by oral ingestion of the egg yolk itself. Clearly, there is no teaching or suggestion in the art for this invention.

The Examiner did not accept that the effectiveness of oral ingestion would be surprising, which is itself surprising. Antibodies are proteins: "Antibodies (also known as immunoglobulins) are proteins that are found in blood or other bodily fluids of vertebrates, and are used by the immune system to identify and neutralize foreign objects, such as bacteria and viruses." (<http://en.wikipedia.org/wiki/Antibody>) It is well known that "Ingested proteins are broken down through digestion, which typically involves denaturation of the protein through exposure to acid and hydrolysis by enzymes called proteases." (<http://en.wikipedia.org/wiki/Protein>) For the examiner to ignore the evidence in the application of improved effectiveness by oral administration as opposed to injection is improper.

There is no teaching or suggestion supporting the combination proposed by the Examiner, and none would be found by one skilled in the art. Even if made, the combination the Examiner proposes would require one skilled in the art to disregard the actual teachings in the cited patents to arrive at the applicants invention; Flint teaches use of non-egg laying animals; Lee teaches purification steps, none of which are required to effectively administer the egg yolk antibodies of the present invention.(See p. p. 26, l. 17-p. 27, l. 4) Neither patent teaches or suggests that the particular method of the invention, i.e. "A method of reducing a content of adipose tissues in the body of a target animal using three animals, a source animal, an egg-laying farm animal and the target animal" could be achieved by oral administration of an ingestible composition containing egg yolk antibodies. Consequently, claims 24-26, 29, 30, 34, 35 and 37-42 are not rendered obvious thereby, and withdrawal of the rejection is respectfully requested.

Based on the above amendment and remarks, reconsideration and allowance of

the application are respectfully requested. However should the Examiner believe that direct contact with the applicant's attorney would advance the prosecution of the application, the examiner is invited to telephone the undersigned at the number given below.

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